◇ Main ship service generators — SOLAS 74/78 II-1/41

NOTE: *Two independent sources of power required.*

- F/O piping
- Cooling lines
- Controls

◇ Emergency generator room — SOLAS 74/78 II-1/43

- Test operation of prime mover
- Personnel safety
- Ventilation adequate
- Electrical switchboard
  - Grounds

◇ Bilge pumps — SOLAS 74/78 II-1/21

- Two required

Notes:_____

Section 4: Drills

◇ Fire Drill:

Initial notifications	Familiarity with duties	Space isolation
General alarms / signals	Familiarity with equipment	Smoke control
Crew response	Fire pumps started	Communications w/ bridge
Properly dressed / equipped	Two jets of water	
Language understood by crew	Fire doors and dampers	

(SOLAS 74/78 III/18.3; MSM Vol. II/22.C.7.i; NVIC 6-91)

Location: _____ Time on Scene: _____

Notes: _____

◇ Fixed fire extinguishing systems: cargo, machinery, and other spaces — SOLAS 74/78 II-2/21

- Tanks, cylinders, piping, controls, alarms, and release mechanisms in good condition and available for immediate use

Type of system: (circle appropriate type)			
Low Pressure CO_2	High Pressure CO_2	Halon	Foam

Pollution Prevention: (spot-check at reexaminations)

☐ Pollution placard posted — 33 CFR 155.450

☐ MARPOL V placard posted — MARPOL Ax. V/9

☐ Garbage
- Shipboard garbage properly disposed — MARPOL Ax. V/3
- Incinerator — 33 CFR 151.63
  - Evidence of use (clinkers)
  - Safety of burner assembly
  - Electrical controls
- Garbage Management Plan — MARPOL Ax. V/9

☐ Oil and hazmat
- Fuel oil and bulk lubricating oil discharge containment — 33 CFR 155.320
- Prohibited oil spaces — 33 CFR 155.470

☐ Oily-water separating equipment, bilge alarm, and bilge monitor — MARPOL Ax. I/16, 33 CFR 155.380
- Alarm, recorder
- Standard Discharge Connection — 33 CFR 155.430

Notes: _____

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Section 5: Expanded Examination Items

Manuals and Instructions:

○ Check for presence (in appropriate language) of the following documents
- Instructions for maintenance and operation of all installations / equipment for fighting and containing a fire — SOLAS 74/78 II-2/20
- Training manual for lifesaving appliances — SOLAS 74/78 III/18.2, SOLAS 74/78 III/51
- Instructions for onboard maintenance of lifesaving appliances — SOLAS 74/78 III/19.3, SOLAS 74/78 III/52
- Stability booklet, associated stability plans and information — SOLAS 74/78 II-1/22, ICLL 66 Reg. 10

○ Cargo gear certificate

○ Grain loading manual — SOLAS 74/78 VI/9.1
- Bulk vessel (stability and grain manuals often combined)

○ Human Factors — STCW Code
- Determine if the appropriate crew members are able to understand the information given in manuals, instructions, etc., relevant to the safe condition of the ship and its equipment, and that they are aware of the requirements for maintenance, periodical testing, training, drills, and recording of logbook entries.

Safety Management System (SMS):

NOTE: *Requirements and guidance for inspecting vessel Safety Management Systems are detailed in SOLAS 74/78, Chapter IX and NVIC 4-98.*

○ Documentation (may be in the form of a Safety Management Manual)
- Controlled documents
- Safety and Environmental policy
- Master of vessel familiar with SMS
- Language understood by crew
- Documentation identifies:
  - Written procedures kept on board vessel
  - Essential or critical equipment identified (or a separate manual containing this information)
  - Procedures for reporting non-conformities
  - Company's designated person(s) (name or title, and address)

Notes: _____

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☐ Lifebuoys (spot-check)

- Condition — SOLAS 74/78 III/19.2
- Bridge location — SOLAS 74/78 III/7.1
  - Quick release system
  - Smoke and light float
- Deck location
  - 50% with waterlights
- Retro-reflective tape — SOLAS 74/78 III/30.2.7

☐ Lifejackets—watchstanders and crew (spot-check)

- Condition — SOLAS 74/78 III/19.2
- Stowage — SOLAS 74/78 III/7.2.2
- Retro-reflective material — SOLAS 74/78 III/30.2.7
- Light — SOLAS 74/78 III/27.2
- Whistles — SOLAS 74/78 III/32.1.6

☐ Line-throwing appliances (spot-check) — SOLAS 74/78 III/17

- 4 charges

☐ Pyrotechnics (spot-check) — SOLAS 74/78 III/6.3

- 12 distress flares

☐ Immersion suits and thermal protective aids (spot-check) — SOLAS 74/78 III/27.3

- Condition — SOLAS 74/78 III/19.2
- Retro-reflective material — SOLAS 74/78 III/30.2.7

Fire Protection:

☐ Fire control plan — SOLAS 74/78 II-2/20

- Permanently exhibited
- Language of flag state
- Copy permanently stored in weathertight container outside deckhouse

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○ Audits

- Internal audits conducted as specified by SMS
  NOTE: *Do NOT examine internal audit records.*
- External audit results reviewed
  - Status of open non-conformities relevant to deficiencies leading to detention
  - Status of implementation of corrective and preventative measure

○ SMS review conducted by Master in accordance with procedures in SMS

- Non-conformities identified
- Report of non-conformity prepared and sent in accordance with procedures established by SMS

Navigation Safety:

○ Test navigation equipment listed in Section 3 to the extent necessary to determine if equipment is operating properly.

○ Human Factors (spot-check): determine if deck officers are familiar with the following items: — STCW Table A-II, NVIC 3-98

- Operation of bridge control and navigational equipment
- Use of nautical publications and charts
- Ship maneuvering characteristics
- Lifesaving signals
- Bridge procedures, instructions, manuals, etc.
- Changing steering from automatic to manual and vice versa
- Preparations for arrival and departure
- Communications with engineroom
- Use of VHF
- Raising the alarm
- Abandon ship drill and fire drill

Notes: _____

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◇ Mooring winches / capstans
- Foundations
- Cables / hooks
- Boom
- Brake
- Electrical (wiring) or hydraulic piping
- Ladders / rails

Cargo Operations:

☐ Cargo securing manual — SOLAS 74/78 VI/5.6, SOLAS 74/78 VII/6.6

☐ Packaged hazmat
- Hazmat containers stowed in accordance with stowage plan and DCM — SOLAS 74/78 VII/6, 49 CFR 176.30
- Unsafe / damaged containers — 49 CFR 176.50
- Leaking / damaged packages — SOLAS 74/78 VII/4
- Placarding — 49 CFR 172.50
- "No Smoking" signs posted — 49 CFR 176.60

☐ Bulk solid hazmat
- Stowage conditions observed — 46 CFR 148.03-11
- Special additional requirements — 46 CFR 148.04
- Additional requirements of special permit — 46 CFR 148.01-11

☐ Cargo ventilation systems — SOLAS 74/78 II-2/53
- Continuously running
- Remote controls outside space
- Indicators on bridge

☐ Hazardous wiring — SOLAS 74/78 II-2/53
- Lights and fixtures
- Wiring

☐ Ramps / watertight doors — ICLL 66 Reg. 21
- Watertight integrity
- Seals
- Locking arrangements
- Controls / warning alarms

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Lifesaving Equipment:

○ Lifeboats/liferafts/rescue boats
- Ensure effective operation of winches, davits, falls, sheaves, etc. (Lower at least one lifeboat to the water.) — SOLAS 74/78 III/19
- Test lifeboat and rescue boat flemming gear and/or engines
- Verify presence/condition of lifeboat equipment — SOLAS 74/78 III/41
- Retro-reflective tape
- Lighting — SOLAS 74/78 III/11.4

○ Emergency communication equipment
- 2-way VHF radiotelephone apparatus — SOLAS 74/78 III/6.2
- Radar transponders
- Survival craft EPIRBs
- Onboard communication and alarm system — SOLAS 74/78 III/6.4

○ Line-throwing appliance — SOLAS 74/78 III/17.49
- Specifications and equipment

○ Pilot ladders and hoists in good condition — SOLAS 74/78 V/17

○ Distress signals — SOLAS 74/78 III/6.3
- 12 red rocket parachute flares

Notes: _____

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☐ Refrigerator and stores spaces — COMDTINST 16711.12A, ILO 147

- Storage free of insects

☐ Sanitation — COMDTINST 16711.12A, ILO 147

- Toilets working (1/8 crew)
- Showers operate (1/8 crew)
- Wash basins
- Lighted / heated / ventilated
- Reasonably clean

☐ General safety — COMDTINST 16711.12A, ILO 147

- Safe access to all spaces
- Spaces adequately lighted
- No electrical hazards
- Warning notices posted as necessary

☐ Muster lists and emergency instructions

- Available for each person — SOLAS 74/78 III/8
- Posted in conspicuous places
- Language understood by crew
- Shows crew member duties — SOLAS 74/78 III/53

Structural Integrity

NOTE: *Request records of Outstanding Conditions of Class. (Form or format may vary depending on classification society.) Conditions of Class may identify structural defects, wastage, etc. Conditions may also identify ships overdue for drydocking, repair or other required service.*

☐ Hull structure — ICLL 66 Reg. 1

- Frame pulling away
- Fractures in corners
- Holes in main decks
- Leaks / patching on ballast tanks
- Bulkheads / decks warped
- Excessive wastage

Notes: _____

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○ Firemen's outfits (spot-check) — SOLAS 74/78 II-2/17.3

- Two lockers
- Two outfits
- Protective clothing
- Helmet, boots, and gloves
- Lamp
- Ax
- Breathing apparatus and lifeline

○ Fixed fire extinguishing arrangements in cargo spaces for vessels ≥ 2000 GT — SOLAS 74/78 II-2/53.1

- Vessels with ro-ro spaces — SOLAS 74/78 II-2/53.2
  - Fixed fire detection and alarm system (vessels built after 01 FEB 92)
  - Fixed fire extinguishing system
  - Portable fire extinguishers and additional fire equipment
  - Ventilation system requirements
  - Explosion-proof fixtures
- Vessels with cargo holds intended for carrying motor vehicles with fuel in their tanks — SOLAS 74/78 II-2/53.3
  - Fixed fire detection and alarm system (vessels built after 01 FEB 92)
  - Fixed fire extinguishing system
  - Portable fire extinguishers and additional fire equipment
  - Ventilation system requirements
  - Explosion-proof fixtures
- Vessels carrying dangerous goods in packaged or solid bulk form — SOLAS 74/78 II-2/54, SOLAS 74/78 VII/1-6
  - Special requirements (see Tables 54.1, 54.2, and 54.3 of II-2/54.2.3 for specific requirements)
  - Document of Compliance (flag state)

Notes: _____

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☐ Communications — SOLAS 74/78 IV/6.3, 33 CFR 26.03
- VHF radio

☐ Steering gear instructions — 33 CFR 164.35
- Instructions
- Emergency instructions
- Block diagram

☐ Maneuvering facts sheet with warning statement — 33 CFR 164.35

☐ Radiotelephone (VHF-FM) — 33 CFR 26.03 & 26.04

☐ EPIRB (406 MHz) — SOLAS 74/78 IV/7.1.6
- Float-free amount
- Battery date current
- Hydrostatic release

☐ GMDSS — SOLAS 74/78 IV/8, SOLAS 74/78 IV/9, SOLAS 74/78 IV/10, SOLAS 74/78 IV/11
- Additional radio equipment for area of operation

◇ Operationally test bridge steering — SOLAS 74/78 II/1-29
- Test power/control pumps independently
- Test follow-up and non-follow-up controls
- Rudder angle indicator accurate
- Activate loss of power alarm

◇ GMDSS lifeboat radios (VHF) — SOLAS 74/78 III/6.2
- 3 if over 500 GT
- Operable condition

◇ 9 GHz radar transponder (SART) — SOLAS 74/78 III/6.2, NVIC 9-93
- Vessels > 300 GT and < 500 require 1
- Vessels > 500 GT require 2
- Stowed so to be rapidly placed in survival craft, or stowed in survival craft

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○ Main engine / vital auxiliaries (spot-check) — SOLAS 74/78 II-1/27
- F/O pumps / piping
- S/W pumps / piping
- J/W pumps / piping
- L/O pumps / piping
- Piston cooling pumps / piping
- Air compressors / receivers
- Fuel / oil purifiers
- H/O heaters / transfer pump

○ Steering gear alarms — SOLAS 74/78 II-1/29
- Low hydraulic oil
- Loss of power
- Loss of phrase
- Overload

○ Human Factors: determine if personnel are familiar with the operation of the following items — STCW Table A-III
- Emergency generator:
  - Actions necessary before engine can be started
  - Different methods by which generator may be started
- Stand-by generator engine:
  - Methods to start engine automatically or manually
  - Blackout procedures
  - Load-sharing system
- Steering gear:
  - Action needed to bring main and auxiliary into operation
  - Changing steering from automatic to manual and vice versa
- Bilge pumps:
  - Starting procedures for main and emergency bilge pump
  - Appropriate valves to operate
- Fire pumps:
  - Starting procedures for main and emergency fire pumps
  - Appropriate valves to operate

Notes: _____

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◇ Oil transfer procedures — 33 CFR 155.720

- Posted / available in crew's language
- List of products carried by vessel
- Description of transfer system including a line diagram of piping
- Number of persons required on duty
- Duties by title of each person
- Means of communication
- Procedures to top off tanks
- Procedures to report oil discharges

Cargo Records:

☐ Packaged hazardous materials

- Dangerous Cargo Manifest — SOLAS 74/78 VII/5
- Division 1.1 or 1.2 explosives (check for required permit for designated dangerous cargo) — 49 CFR 176.30, 49 CFR 176.100
- Training records (check records of crew members considered to be hazmat employees) — 49 CFR 172.700-704
- DOT hazmat registration — 49 CFR 176.13, 49 CFR 107.601

☐ Bulk solid hazmat

- Special permit on board (unlisted cargoes only) — 46 CFR 148.01-7
- Shipping papers — 46 CFR 148.02-1
- DCM on board — 46 CFR 148.02-3
- Cargo inspections carried out and logged — 46 CFR 148.03-7

Notes: _____

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Nonconforming Vessel. Any vessel failing to comply with one or more applicable requirements of U.S. law or international conventions is a nonconforming vessel. A nonconforming vessel is not necessarily a substandard vessel unless the discrepancies endanger the vessel, persons on board, or present an unreasonable risk to the marine environment.

Substandard Vessel. In general, a vessel is regarded as substandard if the hull, machinery, or equipment, such as lifesaving, firefighting and pollution prevention, are substantially below the standards required by U.S. laws or international conventions, owing to:

- The absence of required principal equipment or arrangement;
- Gross noncompliance of equipment or arrangement with required specifications;
- Substantial deterioration of the vessel structure or its essential equipment;
- Noncompliance with applicable operational and/or manning standards; or
- Clear lack of appropriate certification, or demonstrated lack of competence on the part of the crew.

If these evident factors as a whole or individually endanger the vessel, persons on board, or present an unreasonable risk to the marine environment, the vessel should be regarded as a substandard vessel.

Valid Certificates. A certificate that has been issued directly by a contracting government or party to a convention, or on the behalf of the government or party by a recognized organization, and contains accurate and effective dates, meets the provisions of the relevant convention, and corresponds to the particulars of the vessel and its equipment.

Manning Certification:

☐ Safe Manning Document — SOLAS 74/78 V/13; IMO Res.A.481(XII)

- Manning in accordance with document
  NOTE: *If vessel does not have a Safe Manning Document or is not manned in accordance with Safe Manning Document, local Consulate must be contacted and the deficiency resolved prior to vessel's departure from port.*
- Review copy of crew list

☐ Officers' certificates — STCW 95 I/2; STCW 95 I/10; STCW 95 VI/1; STCW 95 VI/2

- Master and chief engineer licenses current
- Navigating and engineering officers' licenses current; ***NOTE:*** *3000 kW = 4023 HP*
- Flag endorsement
- Medical certificates

☐ Crew documents — STCW 95 VI/1

- Documents current
- Medical certificates valid (issued by flag state)
- Minimum age 15 — ILO 147 Art. II

☐ Rest periods — STCW 95 VIII/1

- Review watch schedules

Logs and Manuals:

☐ Lifesaving equipment maintenance record — SOLAS 74/78 III/19

- Periodic checks as required
- Visual inspection of survival craft / rescue boat and launching appliances
- Operation of lifeboat / rescue boat engines
- Lifesaving appliances, including lifeboat equipment examined

☐ Emergency training and drills — SOLAS 74/78 III/18

- Onboard training in use of lifesaving equipment (all crew members)
- SOLAS training manual
- Logbook records — SOLAS 74/78 III/18.5
- Weekly and lifeboat drills — SOLAS 74/78 III/25

Notes: _____

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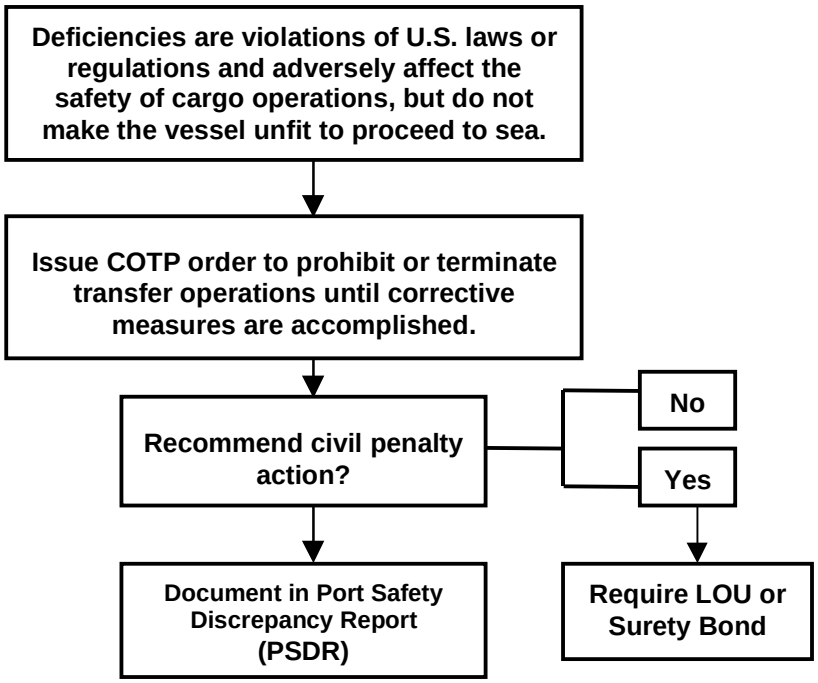
Requiring Corrective Measures Prior to Cargo, Bunkering or Lightering Operations

(NO DETENTION)



Examples include the following:

- Oil transfer procedures incomplete.
- Information on properties and hazards of cargoes not on board.
- High and low level alarms inoperative.

Section 2: Certificates and Documents

International Certificates:

Name of Certificate	Issuing Agency	ID #	Port Issued	Issue Date	Exp. Date	Endors. Date
Certificate of Registry No Change						
Classification Document No Change						
Certificate of Financial Responsibility (COFR) No Change	USCG					
Safety Construction (SLC) No Change						
Safety Equipment (SLE) No Change						
Safety Radio (SLT) No Change						

Requiring Corrective Measures Prior to Entry

Deficiencies discovered prior to a vessel's entry into port present such a grave risk to the port or the environment that the OCMI/COTP may wish to prevent the vessel from entering port until the deficiencies are corrected.

↓

Issue COTP order if the vessel is within the territorial sea.

Examples include the following:

- Leaking tanks.
- Carrying dangerous cargoes with expired documents.
- Carrying incompatible cargoes.
- Invalid ISM certificates.
- COFR not on board.

Involved Parties & General Information:

Owner's Agent
Individual
Phone Number

Charterer's Agent
Individual
Phone Number Same as Owner's Agent

Owner—Listed on DOC (if applicable), or COFR
No Change

Operator
No Change

Notes:

Table of Contents:

Notes:

Total Time Spent Per Activity:

Regular Personnel (Active Duty)			
ACTIVITY TYPE	ACTIVITY	TRAINING	(PERS) MI

TOTAL ADMIN HOURS	TOTAL TRAVEL HOURS

Reserve Personnel			
ACTIVITY TYPE	ACTIVITY	TRAINING	(PERS) MI

TOTAL ADMIN HOURS	TOTAL TRAVEL HOURS

Auxiliary Resources	
TOTAL BOAT HOURS	TOTAL AIRCRAFT HOURS

Conversions:

Distance and Energy				
Kilowatts (kW)	X	1.341	=	Horsepower (hp)
Feet (ft)	X	3.281	=	Meters (m)
Long Ton (LT)	X	.98421	=	Metric Ton (t)

Liquid (***NOTE:*** *Values are approximate.)*

Liquid	bbl/LT	m^3/t	bbl/m^3	bbl/t
Freshwater	6.40	1.00	6.29	6.29
Saltwater	6.24	.975	6.13	5.98
Heavy Oil	6.77	1.06	6.66	7.06
DFM	6.60	1.19	7.48	8.91
Lube Oil	7.66	1.20	7.54	9.05

Weight

1 Long Ton	=	2240 lbs	1 Metric Ton	=	2204 lbs
1 Short Ton	=	2000 lbs	1 Cubic Foot	=	7.48 gal
1 Barrel (oil)	=	5.61 ft = 42 gal = 6.29 m^3	1 psi	=	.06895 Bar = 2.3106 ft of water

Temperature: Fahrenheit = Celsius (°F = 9/5 °C + 32 and °C = 5/9 (°F – 32))

0	=	-17.8	80	=	26.7	200	=	93.3
32	=	0	90	=	32.2	250	=	121.1
40	=	4.4	100	=	37.8	300	=	148.9
50	=	10.0	110	=	43.3	400	=	204.4
60	=	15.6	120	=	48.9	500	=	260
70	=	21.1	150	=	65.6	1000	=	537.8

Pressure: Bars = Pounds per square inch

1 Bar	=	14.5 psi	5 Bars	=	72.5 psi	9 Bars	=	130.5 psi
2 bars	=	29.0 psi	6 Bars	=	87.0 psi	10 Bars	=	145.0 psi
3 Bars	=	43.5 psi	7 Bars	=	101.5 psi			
4 Bars	=	58.0 psi	8 Bars	=	116.0 psi			